Appln. No.: 10/601,161 ITDE-PNV105US

Amendment Dated September 28, 2006 Reply to Office Action of June 29, 2006

<u>Amendments to the Claims:</u> This listing of claims will replace all prior versions, and listings, of claims in the application

Listing of Claims:

1. (Currently Amended) A boule for use in fabricating microchannel plates, the boule including:

a hollow glass tube formed of non-etchable glass, said tube having a plurality of flat inner surfaces, each surface is generally planar and extends generally parallel to the longitudinal axis of the tube.

- 2. (Currently Amended) The boule of claim 1 further including:
- a plurality of optical fibers, <u>located in said tube</u>, each <u>of</u> said optical fibers having a cladding layer formed of a non-etchable material and a core formed of etchable material, and a plurality of support rods formed of non-etchable material located between the flat inner surfaces and the optical fibers.
- 3. (Currently Amended) The boule of claim 1 wherein the packingsaid tube has at least 8 flat inner surfaces.
- 4. (Currently Amended) The boule of claim 1 wherein the packingsaid tube has 12 flat surfaces.
- 5. (Original) The boule of claim 1 wherein the width of the flat surfaces vary.
- 6. (Original) The boule of claim 1 wherein the width of each of a first plurality of flat surfaces has a first dimension and the width of each of a second plurality of flat surfaces has a second dimension different than the first dimension.
- 7. (Original) A boule in accordance with claim 6 wherein the first dimension is smaller than the second dimension.
- 8. (Currently Amended) The boule of claim 2 wherein the fibers, rods and packing the tube are fused together to form a fused boule.
- 9. (Original) The boule of claim 2 wherein the support rods have a cross-sectional shape including a flat surface for engaging the flat inner surfaces of the tube.

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- 10. (Original) A microchannel plate formed from the boule of claim 8.
- 11. (Currently Amended) A method of forming a microchannel plate, said method comprising the steps of:

providing a bundle of fibers wherein, each fiber has an etchable core surrounded by a non-etchable cladding;

packing a plurality of said bundles into a hollow packing tube formed of non-etchable material and which has a plurality of flat inner surfaces;

positioning a plurality of support rods between said fibers and said flat inner sufaces to form a packed boule; and

fusing the fibers, packing tube and support rods to form a fused boule.

- 12. (Currently Amended) The method claim 11 wherein the glass-packing tube has at least 8 flat surfaces.
- 13. (Currently Amended) The method of claim 11 wherein the glass-packing tube has 12 flat surfaces.
- 14. (Original) The method of claim 11 wherein the width of the flat surfaces vary.
- 15. (Original) The method of claim 11 wherein the width of each a first plurality of flat surfaces has a first dimension and the width of each of a second plurality of flat surfaces has a second dimension different than the first dimension.
- 16. (Original) The method of claim 15 wherein the first dimension is small than the second dimension.
- 17. (Currently Amended) The method of claim 11 wherein the support rods have a cross-sectional shape including a flat surface and wherein at least some of the flat surfaces of the support rods engage the flat inner surfaces of the <u>packing</u> tube.
- 18. (Original) The microchannel plate formed by the method of claim 11.